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We claim:

- 1. A method for inducing an immune response in an animal to a tumor antigen comprising administering an effective amount of a tumor antigen or a nucleic acid sequence encoding a tumor antigen to a lymphatic site in the animal.
- 2. A method according to claim 1 wherein the tumor antigen is selected from the group consisting of CEA, gp100, the MAGE family of proteins, DAGE, GAGE, RAGE, NY-ESO 1, Melan-A/MART 1, TRP-1, TRP-2, tyrosinase, HER-2/neu, MUC-1, p53, KSA, PSA, PSMA, and fragments and modified versions thereof.
- 15 3. A method according to claim 1 wherein the lymphatic site is a lymph node.
- 4. A method according to claim 1 wherein the nucleic acid is selected from the group consisting of viral nucleic acid, bacterial DNA, plasmid DNA, naked/free DNA, and RNA.
 - A method according to claim 4 wherein the viral nucleic acid is selected from the group consisting of adenoviral, alphaviral and poxviral nucleic acid.
 - A method according to claim 5 wherein the poxviral nucleic acid is selected from the group consisting of avipox, orthopox and suipox nucleic acid.
- A method according to claim 5 wherein the poxviral nucleic acid is selected from the group consisting of vaccinia, fowl pox, canarypox and swinepox nucleic acid.



- 8. A method according to claim 5 wherein the poxviral nucleic acid is selected from the group consisting of MVA, NYVAC, TROVAC, and ALVAC nucleic acid.
- A method according to claim 1 wherein the nucleic acid is contained in a vector.
- 10. A method according to claim 9 wherein the vector is a recombinant virus or bacteria.
 - 11. A method according to claim 10 wherein the recombinant virus is selected from the group consisting of adenovirus, alphavirus and poxvirus.
 - 12. A method according to claim 11 wherein the poxvirus is selected from the group consisting of avipox, orthopox and suipox.
- 13. A method according to claim 11 wherein the poxvirus is selected from the group consisting of vaccinia, fowlpox, canarypox and swinepox.
 - 14. A method according to claim 11 wherein the poxvirus is selected from the group consisting of MVA, NYVAC, TROVAC, and ALVAC.
- 25 15. A method according to claim 1 wherein the nucleic acid is contained in a cell.
 - A method according to claim 1 wherein the tumor antigen or nucleic acid coding therefor is contained in a vaccine.
 - 17. A method according to claim 1 wherein the tumor antigen is gp100, CEA or a fragment or modified version of gp100 or CEA..

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- 18. A method according to claim 17 wherein the modified gp100 comprises the sequence IMDQVPFSY (SEQ ID NO: 1) and/or YLEPGPVTV (SEQ ID NO:2).
- 19. A method according to claim 17 wherein the modified CEA comprises the sequence shown in Figure 8 (SEQ ID NO:112) and/or YLSGADLNL (SEQ ID NO:113).

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